



# System-of-Care Evaluation Brief

## Chronic Physical Illness and Children's Mental Health

Over the last several decades, improved child health care has increased the survival rate of children with chronic physical illnesses. Children with chronic medical conditions, however, may more than double their risk of having a diagnosable mental health disorder (Thompson & Gustafson, 1996). Mental health disorders and chronic physical illness may co-occur for a wide range of reasons. Chronic childhood physical illness can affect mental health directly through central nervous system changes that are part of the illness process or the side effects of the medications that are necessary for treating the illness. The demands of treatment for chronic childhood illness can also increase stress for families. Frequent visits to health care providers, complex daily treatment regimens and caring for children who may frequently miss school and other social activities due to illness episodes are just a few of the increased family demands associated with chronic childhood illness.

Although significant attention has been devoted to understanding the adjustment of children and adolescents with chronic physical illness (Thompson & Gustafson, 1996), little is understood about how chronic physical illness affects children with serious emotional disturbance. It is important to understand the extent to which chronic physical illness is present in children and adolescents who are entering community-based mental health services. Chronic childhood physical illness may in part account for the behavioral and emotional symptoms that are present and may contribute to problems in functioning across multiple aspects of children's day to day environments. The presence of chronic physical illness should be considered an important aspect of the comprehensive evaluation of children and adolescents at intake into mental health services. Care plans should address directly the community supports necessary to assist children and families to cope effectively with chronic physical illness.

Children may experience a wide range of chronic physical illnesses. The list on page 2 contains some examples of typical childhood chronic illnesses (Newacheck & Taylor, 1992).

To assess the extent and impact of chronic childhood physical illness on children and adolescents with serious emotional

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**National Evaluation  
Comprehensive Community Mental Health  
Services for Children and Their Families Program**

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## Typical Childhood Chronic Illnesses

- Deafness and hearing loss
- Blindness and vision impairment
- Speech defects
- Cerebral palsy
- Diabetes
- Sickle cell disease
- Anemia
- Asthma
- Respiratory allergies
- Eczema and skin allergies
- Epilepsy and seizures
- Arthritis
- Heart disease
- Frequent ear infections
- Frequent bowel trouble
- Digestive allergies
- Frequent or severe headaches
- Musculoskeletal impairments such as muscular dystrophy, spina bifida, etc.

disturbance, data from six sites participating in the Longitudinal Comparison Study of the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program were analyzed. Face-to-face interviews were conducted with 1,036 children and their caregivers at the time of entry into mental health services in three CMHS funded system-of-care sites and three demographically matched comparison communities. During the caregiver interview, the question was asked, "Does your child have a recurring health problem such as asthma, hayfever, migraine headaches, etc.?" A description of the chronic illness was also recorded. Behavioral measures used in the caregiver interview included the Child Behavior Check List (CBCL) and the Child and Adolescent Functional Assessment Scale (CAFAS).

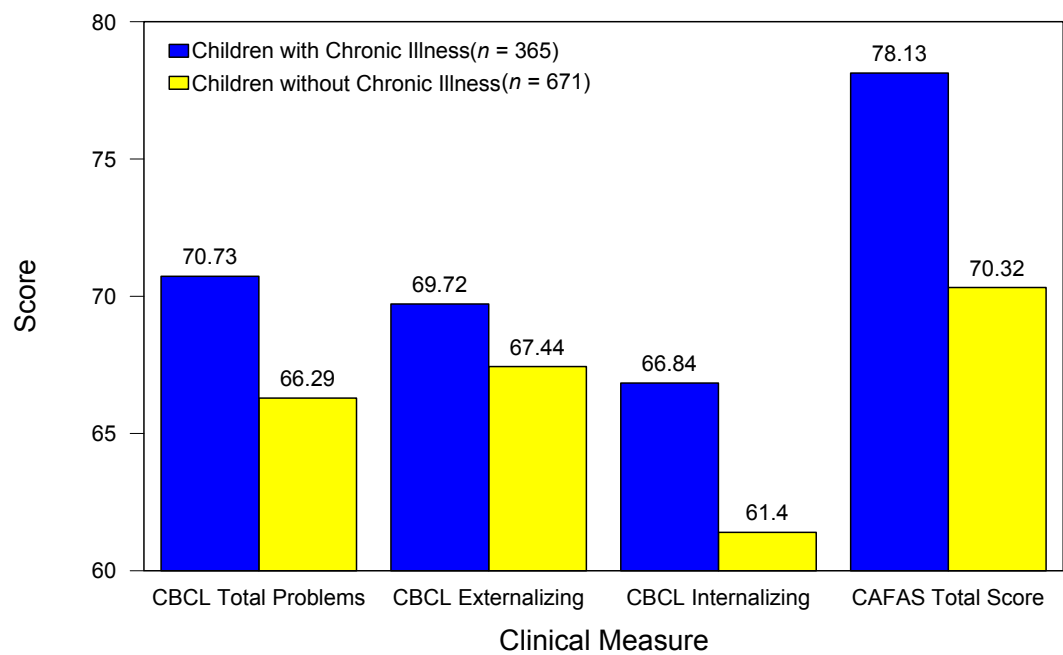
The majority of the children enrolled in the longitudinal comparison study were males (67%). The age range of children was evenly distributed with 53 percent of children age 12 or over and 47 percent age 11 and younger. Racial/ethnic backgrounds of the children and families included: Caucasian (37%), African American (43%), and Hispanic (11%). Finally, the families participating in the longitudinal comparison study were primarily poor. Approximately 60% of the families reported an annual income below the poverty level for a family of four and 20 percent of families reported annual incomes of \$5,000 or less.

Approximately 35% ( $n = 365$ ) of the children and adolescents were reported to have at least one chronic physical illness with 6.7% reported to have two or more chronic physical illnesses. The rate of chronic childhood illness is somewhat higher than the 32% prevalence rate reported for the overall population of children and adolescents in the United States (Newacheck & Taylor, 1992). Asthma (14.2%) was far and above the most frequent illness reported followed by severe headaches (7.2%) and other respiratory allergies/problems (7%). Heart problems, digestive disorders, seizure disorders, and skin allergies were reported less frequently and for less than 2% of the participants. The presence of chronic physical illness was not significantly different as a function of age of the child, family racial/ethnic background or annual family income.

Scores on the CBCL and CAFAS were compared for children with and without a chronic physical illness (see Figure 1). Children with chronic physical illness had significantly higher levels of both externalizing and internalizing behavioral and emotional symptoms on the CBCL. The differences for internalizing symptoms are in part due to the fact that symptoms of chronic illness are included as items on the internalizing scale of the CBCL. However, children with chronic physical illness also displayed higher scores on subscales assessing depression and anxiety, which are also included in the overall internalizing score. Children with chronic physical illness additionally displayed more functional impairment on the total score from the CAFAS. Children with chronic physical illness showed more

functional impairment on CAFAS subscales assessing thinking, self-harm, moods and behavior towards others. Nonetheless, this pattern of results suggests that chronic physical illness may add significantly to the symptom burden experienced by children and adolescents with serious emotional disturbance.

**Relationships between Chronic Physical Illness, Behavioral Symptoms, and Functional Impairment at Entry into Services**



**Figure 1**

There are a number of implications of these results for the services that systems of care provide for children and adolescents with serious emotional disturbance. First, it is important that service providers recognize that over one-third of children and adolescents with serious emotional disturbance are also coping with a chronic physical illness at the time that they enter services. Heightened awareness should lead to greater sensitivity to the co-occurrence of mental health disorders and chronic physical illness, and the inclusion of strategies within care plans for comprehensively addressing the complete health care needs of children and their families. Second, the high rate of chronic physical illness argues for the importance of including the health care system as a fully involved partner in the care of children with serious emotional disturbance. Medical care has traditionally been linked with the provision of medication supports for treating serious emotional disturbance, but can also be important in crafting effective strategies for supporting children and families as they cope with the burdens of chronic physical illness. Finally, the specific results of this analysis suggest that some of the behavioral and emotional symptoms and impairment that children and adolescents with serious emotional disturbance display is related to their chronic physical illness. Misattributing these symptoms to other factors may lead to blaming children and their families rather than supporting their efforts to directly address the demands associated with childhood chronic illness.

**References:**

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Thompson, R. J., & Gustafson, K. E. (1996). *Adaptation to Chronic Childhood Illness*. Washington, DC: American Psychological Association.

***Children with serious emotional disturbance and chronic physical illness have more serious behavior and functioning problems as measured by the CBCL and the CAFAS.***



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